

Discovery of *Lopheros lineatus* (Gorham, 1883) (Coleoptera, Lycidae) in Mordovia, Central Russia

S. V. Kazantsev^{a*}, L. V. Egorov^{b**}, and A. B. Ruchin^{c***}

^a*Insect Centre, Moscow, 109651 Russia*

^{*}*e-mail: kazantss@mail.ru*

^b*“Prisursky” State Nature Reserve, Russia*

^{**}*e-mail: platyscelis@mail.ru*

^c*Mordovia State Nature Reserve and “Smolny” National Park, Russia*

^{***}*e-mail: ruchin.alexander@gmail.com*

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Abstract—The net-wing beetle *Lopheros lineatus* (Gorham, 1883), previously known in the western Palaearctic only from Poland, and in the eastern Palaearctic, from the southern Russian Far East and from Japan, is discovered in Mordovia, Central Russia.

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Lopheros lineatus (Gorham, 1883) was described from Japan in the genus *Plateros* Bourgeois, 1879 (Gorham, 1883). Later this species was found in the Soviet Union, in the Far East, and described as *Dictyoptera motschulskii* Barovskij, 1930 and *Aplatopterus mamaevi* Medvedev, 1979. In 1969 the species was assigned to *Lopheros* LeConte, 1881 (Nakane, 1969). Afterwards *Lopheros lineatus* was quite unexpectedly discovered in the primeval forest of the Puszcza Białowieża in Poland (Burakowski, 1990); all adult specimens were reared from larvae collected in ‘large quantities’. Meanwhile, *D. motschulskii* and *A. mamaevi* were found to be younger synonyms of this species (Kazantsev, 1993).

Although Burakowski (1990) believed that the absence of *L. lineatus* in Eastern Europe and Siberia was just due to the lack of collecting records, until now this species was considered to have a several thousand kilometer gap between the western and eastern parts of its distribution area (Kazantsev, 2012). Collecting in the Mordovia State Nature Reserve with a Flight Intercept Trap (FIT) in 2018 yielded several adults of *L. lineatus* some 1500 km east of Puszcza Białowieża

(Fig. 1), which proved correctness of Burakovski’s opinion.

The following acronyms are used in this paper: ICM—Insect Center, Moscow; ZIN—Zoological Institute of the Russian Academy of Sciences, St. Petersburg; ZMMU—Zoological Museum of Moscow University.

The macrophotographs were taken with Canon EOS 6D camera and Canon MP-E 65 mm lens.

Subfamily **EROTINAE** LeConte, 1881

Tribe **Erotini** LeConte, 1881

Type genus: *Eros* Newman, 1838.

Genus **LOPHEROS** LeConte, 1881

Type species: *Omalisus fraternus* Randall, 1838.

Lopheros lineatus (Gorham, 1883)

(Fig. 2)

Plateros lineatus Gorham, 1883 : 406.

Dictyoptera motschulskii Barovskij, 1930 : 359.

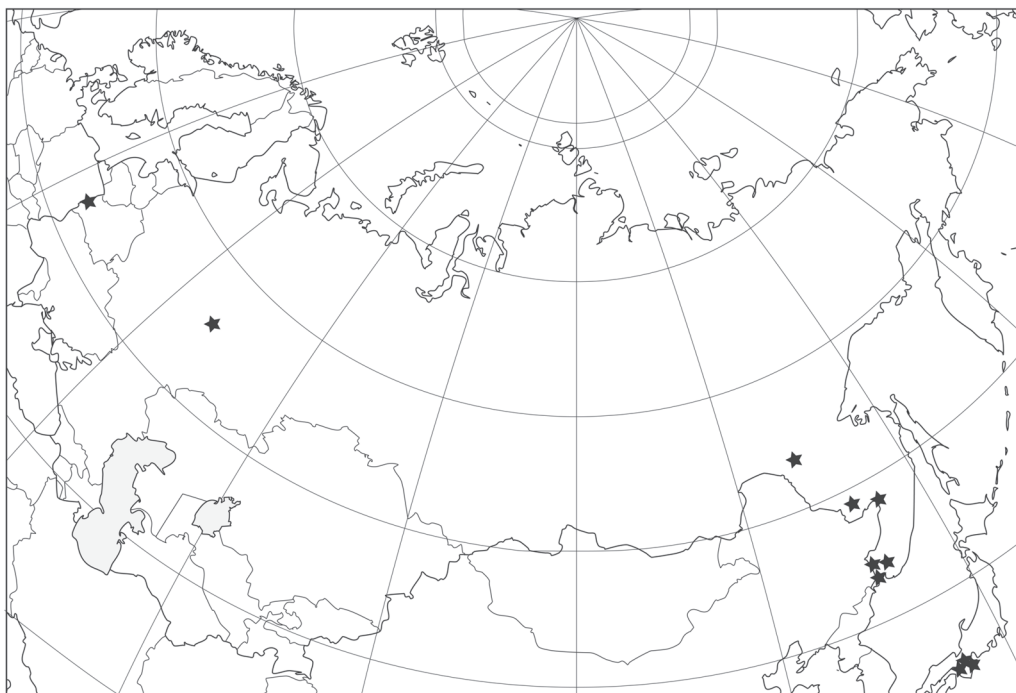


Fig. 1. Map of *Lopheros lineatus* (Gorham) distribution.

Lopheros lineatus (Gorham, 1883): Nakane, 1969 : 110.

Aplapterus mamaevi Medvedev, 1979 : 240.

Material. Russia, Mordovia, 27.5 km N of Temnikov, Mordovia State Nature Reserve, env. of Plotomoika Stn., quarter 34, 54°53'30"N, 43°10'05"E, Satis River valley, lime tree forest with birches and fallen spruces, FIT, 28.VI–12.VII.2018 (G.B. Semishin and L.V. Egorov), 3 ♂, (ICM, ZIN and ZMMU).

Distribution (Fig. 1). Poland (Puszcz Białowieża), Central European Russia (Mordovia), Russian Far East (Amurskaya Prov., Jewish Autonomous Prov., south of Khabarovsk Terr., Primorskiy Terr., Northeastern China, Japan (southeastern Honshu).

Biology. In Puszcz Białowieża (Poland) the larvae were collected in a shady and moist alder stand (*Circaea-Alnetum* plant association), in a large fallen trunk of the common ash (*Fraxinus excelsior* L.), in crevices 50–100 mm deep, in grayish-brown damp decayed wood. The mature larvae were found in large quantities in small agglomerations in the middle of April, pupation took place at the beginning of May and the adults emerged about the middle of May (Burakowski, 1990). At the



Fig. 2. General view of *Lopheros lineatus* (Gorham), male.



Fig 3. Biotopes of *Lopheros lineatus* (Gorham) in Mordovia State Nature Reserve.

same time, there is no information about the biology of *L. lineatus* in the eastern part of the distribution area, except that the larvae from Primorskij and Khabarovskij Krajs were found in brown damp decayed wood in April and May (Pototskaya, 1981).

In Mordovia, several male specimens of *L. lineatus* were collected in late June–early July in flight intercept traps set in a lime tree (*Tilia cordata* Mill.) forest with birches (*Betula* sp.) and fallen spruces (*Picea abies* (L.)) (Fig. 3). As there were no ash trees in the locality, it could be presumed that its larvae are associated with one of the mentioned plants.

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ADDITIONAL INFORMATION

This article was originally submitted by the authors in English and is first published here.

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